

BEST AVAILABLE COPY

PTO/SB/08A (04-05)

Approved for use through 04/30/2003. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 5

Complete if Known

Application Number	10/710,769
Filing Date	August 2, 2004
First Named Inventor	Hall, et al.
Art Unit	2632
Examiner Name	
Attorney Docket Number	68.0074

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
R		US- 5,850,369	12/15/1998	Rorden, Louis H., et al	
		US- 6,392,317 B1	5/21/2002	Hall, David R., et al	
		US- 6,657,551 B2	12/2/2003	Huckaba, Bruce S., et al	
		US- 6,670,880 B1	12/30/2003	Hall, David R., et al	
		US- 6,717,501 B2	4/6/2004	Hall, David R., et al	
		US- 6,735,633 B1	5/11/2004	Welch, William, et al	
		US- 6,763,391 B1	7/13/2004	Ludtke, Aaron	
		US- 6,798,832 B2	10/5/2004	Hall, David R., et al	
		US- 6,816,456 B1	11/9/2004	Tse-Au, Elizabeth Suet Hing	
		US- 6,820,117 B1	11/16/2004	Johnson, Christopher L.	
		US- 6,821,147 B1	11/23/2004	Hall, David R., et al	
		US- 6,830,467 B2	12/14/2004	Hall, David R., et al	
		US- 6,842,469 B1	1/11/2005	Drwiega, Tadeusz J., et al	
		US- 6,844,498 B2	1/18/2005	Hall, David R., et al	
		US- 6,888,473 B1	5/3/2005	Hall, David R., et al	
		US- 6,913,093 B2	7/5/2005	Hall, David R., et al	
		US- 6,929,493 B2	8/16/2005	Hall, David R., et al	
		US- 6,931,011 B2	8/16/2005	Giacopelli, James N., et al	
		US- 6,945,802 B2	9/20/2005	Hall, David R., et al	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ²
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

9/16/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801:04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

BEST AVAILABLE COPY

PTO/BB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

of 5

Complete If Known

Application Number	10/710,769
Filing Date	August 2, 2004
First Named Inventor	Hall, et al.
Art Unit	2632
Examiner Name	
Attorney Docket Number	86.0074

Examiner Initials*	Cite No.†	U. S. PATENT DOCUMENTS			
		Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 20050236160 A1	10/27/2005	Hall, David R., et al	
		US- 20050212530 A1	9/29/2005	Hall, David R., et al	
		US- 20050173128 A1	8/11/2005	Hall, David R., et al	
		US- 20050161215 A1	7/28/2005	Hall, David R., et al	
		US- 20050150653 A1	7/14/2005	Hall, David R., et al	
		US- 20050145406 A1	7/7/2005	Hall, David R., et al	
		US- 20050118848 A1	7/2/2005	Hall, David R., et al	
		US- 20050115717 A1	7/2/2005	Hall, David R., et al	
		US- 20050095827 A1	5/5/2005	Hall, David R., et al	
		US- 20050093296 A1	5/5/2005	Hall, David R., et al	
		US- 20050092499 A1	5/5/2005	Hall, David R., et al	
		US- 20050082082 A1	4/21/2005	Hall, David R., et al	
		US- 20050070144 A1	3/31/2005	Hall, David R., et al	
		US- 20050067169 A1	3/31/2005	Hall, David R., et al	
		US- 20050046590 A1	3/3/2005	Hall, David R., et al	
		US- 20050046586 A1	3/3/2005	Hall, David R., et al	
		US- 20050045339 A1	3/3/2005	Hall, David R., et al	
		US- 20050039812 A1	2/24/2005	Hall, David R., et al	
		US- 20050036507 A1	2/17/2005	Hall, David R., et al	

Examiner Initials*	Cite No.†	FOREIGN PATENT DOCUMENTS			
		Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ² Number ⁴ Kind Code ⁵ (if known)			

Examiner Signature	<i>AM</i>	Date Considered	9/16/06
-----------------------	-----------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). † See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ‡ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). § For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ¶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ** Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.87 and 1.89. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

BEST AVAILABLE COPY

PTO/SB/08A (04-03)

Approved for use through 04/30/2003, OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 8 of 5

Complete if Known

Application Number	10/710,769
Filing Date	August 2, 2004
First Named Inventor	Hall, et al.
Art Unit	2832
Examiner Name	
Attorney Docket Number	66.0074

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
A		US- 20050035876 A1	2/17/2005	Hall, David R., et al	
		US- 20050035875 A1	2/17/2005	Hall, David R., et al	
		US- 20050035874 A1	2/17/2005	Hall, David R., et al	
		US- 20050001736 A1	1/8/2005	Hall, David R., et al	
		US- 20050001735 A1	1/8/2005	Hall, David R., et al	
		US- 20040246142 A1	12/9/2004	Hall, David R., et al	
		US- 20040244964 A1	12/9/2004	Hall, David R., et al	
		US- 20040244916 A1	12/9/2004	Hall, David R., et al	
		US- 20040216847 A1	11/4/2004	Hall, David R., et al	
		US- 20040164838 A1	8/26/2004	Hall, David R., et al	
		US- 20040164833 A1	8/26/2004	Hall, David R., et al	
		US- 20040150532 A1	8/6/2004	Hall, David R., et al	
		US- 20040146492 A1	7/28/2004	Hall, David R., et al	
		US- 20040113808 A1	6/17/2004	Hall, David R., et al	
		US- 20040104797 A1	6/3/2004	Hall, David R., et al	
		US- 20050046588 A1	5/6/2004	Hall, David R., et al	
		US- 20040085988 A1	3/3/2005	Gardner, Wallace R., et al	
		US- 20030011489 A1	1/16/2003	Viswanathan, Raman	
		US- 20020101359 A1	8/1/2002	Hall, David R., et al	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T*
		Country Code* Number* Kind Code* (if known)				

Examiner Signature	<i>AM</i>	Date Considered	9/16/06
--------------------	-----------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

BEST AVAILABLE COPY

PTO/SR/08A (04-03)

Approved for use through 04/30/2003. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	4	of	5
-------	---	----	---

Complete if Known

Application Number	10/710,769
Filing Date	August 2, 2004
First Named Inventor	Hall, et al.
Art Unit	2632
Examiner Name	
Attorney Docket Number	68,0074

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	<i>[Signature]</i>	Date Considered	9/16/06
-----------------------	--------------------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

BEST AVAILABLE COPY

PTO/SB/08B (04-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO


**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/710,769
Filing Date	August 2, 2004
First Named Inventor	Hall, et al.
Art Unit	2632
Examiner Name	
Attorney Docket Number	66.0074

Sheet 5 of 5

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		PCT/US80318476, Published 12/04/2003, Applicant Baker Hughes; International Search Report "Documents Considered to Be Relevant"	

Examiner Signature		Date Considered	9/16/06
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 38 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-788-9199) and select option 2.